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It is well known that an educated man can not be educated mentally alone but likewise his physical education must receive careful attention.

History reveals the fact that for some time past that the physical education of the people has received far too little attention. Today the American people are fast beginning to realize that the mental training is not the only factor in education to be considered. The laws that govern the health and the development of the body are fast taking a place of first importance, because of the relation existing between the mental and physical development. That the two go hand in hand is shown in the individual but here is not the only place. In the history of nations it is found as well.

Ancient Greece was the first of nations to make physical exercises a part of its educational exercises. And so long as these practices were exercised the Greek nation rose intellectually and politically and its people became a people of great physical power. Soon riches caused the people to abandon this mode of education and there physical exercises were forgotten in their luxurious living. Then the progress of the nation ceased, her intellectual power soon began to grow less and politically she degenerated fast until the nation fell.

Germany has especially in late years made great advancement both intellectually and politically. The Germans themselves attribute a large share of their advancement due to the physical training which has been introduced into the schools and army of that country.

England has for many years been among the leading nations in the advancement of the value of physical training in our schools. Here we find many brilliant men, many more than we do in France



where no thought is given to the physical side of the education.

In our own country where **excellence** in intellectual ability is being much sought and attained we find that the people are giving much more attention to the physical side of education than a few years ago. In all of our Universities and Colleges of importance the **gymnasium** is almost if not entirely as essential as the lecture room. Even in many of the high schools the example of the higher institutions are being closely followed. Now the grades are taking up the work of the physical side of the education with much enthusiasm. The majority of our noted educators are advocating the more careful attention of the physical side of the education of the child.

The physical is the foundation of all life, **mental** included and in considering the physical side of education we are only following nature's own directions and give it the place which it seems most to deserve. In the history of nature the inanimate seems to have been the first of existing forms. After this was the appearance of the plant forms with their own nutritive processes and powers of generation. After the plants came the lower forms of animal life with the additional powers of sensation and movement, next we find the advancement of the animals with powers of consciousness and last of all in this process of **evolution** is the appearance of the human being, with powers of self consciousness and choice of direction. Man the last of these possesses the characteristics of both the plants and animals. His body contains a nervous system with its brain centers and mind powers. So it can be seen that through all these stages of development the physical leads while the mental and nervous system develops with and within the other.

This is alone sufficient reason why the physical side of education should receive as much attention as the mental side.



The effect of the mind on the body is readily shown. It is well known that such states as grief, fear, anxiety or depression soon make a decided showing upon the body. And as easily is it shown that the body affects the mind. When the muscles of the body are fatigued the brain power is lessened being not nearly so active as when the body is fresh and free from fatigue. When the person is affected with some bodily disease the brain is much slower to respond to impulses than when good health is enjoyed. Soon after a hearty meal the mind power is at a very low dyne of activity due to the absence of the blood from the brain, called away on account of its necessity to the digestive processes.

When hunger, cold and heat are experienced to such an extent that distress is felt little brain activity is taking place. In the morning the mental powers are much greater than they are from the middle of the afternoon on until evening.

Both the body and the brain are healthier when both are doing a moderate amount of work. Spender said; "The first requirement to life is to be a good animal".

Body Culture includes health, strength, grace and dexterity which are gained through hygeinics, gymnastics, play and manual training. The craving for physical exercise is only natural, is exceedingly wholesome and should be intelligently satisfied. The constant activity of small children is an admirable example of a provision made for their well being. There is a greater need for a sound body and of out door life to keep it sound then ever before because our people are a people who are constantly undergoing greater stresses and strains. Many of the applicants for positions are asked, "Have you any physical defect"? and many are unable to secure positions on account of such misfortunes because they



weaken their mental powers.

Health is an indispensable condition of mental growth and to secure health the exercise and fresh air habit must be thoroughly practiced. President Eliot of Harvard once wrote; "The fresh air habit at home and in the school is the most wholesome bodily habit that can be implanted at the school age.

In our school system of today we find this principle of physical education being set forth to a considerable degree. Four agencies are instrumental in aiding in the physical education. These are play, manual training, gymnastics and athletics.

Play is the first of the bodily exercises that aids in the physical education of the being. Play is the highest phase of child development. It is the self active representation of the inner feeling of the individual. Frochel wrote, "The play of the child contains the germ of the whole life that is to follow, for the more he develops and manifests himself in play, and reveals the noblest aptitudes and the deepest elements of his being". In play we find the truest expression of the child. It has been said that ~~man~~ is wholly man only when he plays.

Play develops originality and the sense of responsibility. The play ground is only an opportunity for the child to express himself and show what he is. Play is one form of bodily exercise that the individual does not need to be taught. All of the lower animals have their plays, especially in the younger periods of their development. The value of play in the department of education has been recognized only in recent years. The nearest to that of the present time was the place of honor it was given by the Greeks. The play of the child bears a close resemblance to the habits of the more mature individual. The action in play is spontaneous and is



not done to attain some particular end but rather for the pleasure and enjoyment of the individual. In contrast to work, play is always agreeable the individual shows his individuality and responsibility is not even thought of.

Three well known theories in regard to play, viz; The surplus energy theory, the recreation theory and the practice theory. In the surplus energy theory it is maintained that play is a vent for the surplus vitality. This is probably true to a certain degree but not wholly as both man and animals play when there is no surplus energy.

The recreation theory sets forth the theory that the play is for relaxation and rest of the exhausted and overstrained powers and there is no doubt about play renewing and refreshing the powers of the person but often when there is no need of recreation we find play. The practice theory sets forth the idea that play is a preparation for the more serious part of the mature life. The child's plays are in imitation of the works of their elders. The young animal's plays closely resemble the life habits of the grown animal. Play is not to be looked at as an unnecessary and useless proceeding but rather as a very significant factor in the educational processes.

Often for play a substitution is necessarily made. This is done through gymnastics, calisthenics and athletic sports.

In gymnastics we find a physical exercise that is consciously directed by the individual. Here is an exercise not wholly of the physical powers but of the mental as well, the will being constantly brought into use. Gymnastics is not so interesting and pleasing as play but frequently becomes tiresome and fatiguing. But Gymnastics well directed is very beneficial as the whole body



receives careful attention. It is pleasing to find that gymnastic exercises are becoming more and more prominent in the educational institutions of our country. For through them the body is kept more nearly in its normal conditions which is conducive to the proper functional processes. The nerve centers are stimulated and organized and the body is more readily and accurately following the direction of the mind.

Closely related to gymnastics but far more interesting and in some ways more beneficial are the athletic sports. These have and should have a very prominent place in our educational institutions. In short Athletics is playing to win. Rivalry is the most prominent feature in athletics but not carried to the extent of winning by unfair means. Here a square deal is always sought and respected. Many papers have been written and discourses given on the honor system in schools but no where can be found a place that more rigidly requires the enforcement of the honor system than on the athletic fields of our schools.

When properly considered Athletics should be toward the end of the combination of physical exercise and recreation. Every other matter then should be of secondary importance.

The development of athletics has been accomplished to any great extent only in recent years. With this development has come to a large degree the eradication of rowdyism and ungentlemanly conduct among the students of schools. Tests of manhood are found on the athletic field that cannot be found in any other place. Here courage, self endurance, self control and endurance, all qualities greatly admired in a man are taught here as they can be only here. Another very beneficial result is the elimination of fear. It is while partaking in these exercises that the person often finds his



own power and from that time on is better able to face danger and to suffer without complaint. When President Roosevelt entered Harvard he was a weakly person physically but nevertheless took part in various forms of athletics. In none of them did he distinguish himself. His purpose was to obtain a sound body to maintain a sound mind. At present he is a man of remarkable strength and bodily health and maintains a powerful and brilliant mind.

Objections are raised by some to athletics. Some maintain that this form of exercise is entirely too exclusive, only a limited number participating in the various games. This objection is hardly justifiable when a careful examination of the percentage of students that actually take part in athletics is made. It has been found that as a rule at least fifty per cent of the student body actually take part in these sports and more could at least receive the training that is so beneficial if they so desired. Another objection is the time that is spent away from the regular class work. This may in some cases be true but generally it is found that the athlete is as proficient in his class work as are his fellow students who do not participate..

Other objections are offered but like wise are advantages, that offset those brought forth. In general athletics develop the body and build the man up both mentally and morally. The individual is brought into close contact with his fellow students by athletics in away that is found in no other department of his school. With all the evils that prevail in our school athletics there is so much good that the evil side although it should be eliminated is not sufficiently great as to in any way to cause the decline of athletics.

Manual training is also an aid in the physical development of individuals. But it is also more than this. It is fine



expression in material forms of the minds work.

The value of manual training when properly combined with literary, scientific and mathematical studies is very great.

One of its greatest values is its tendency to keep boys in school much longer than they would otherwise stay. One Superintendent says, "Manual training has increased the attendance of boys in the high schools thirty three per cent." It is a well known fact that as a rule classes of boys diminish as they advance in the schools until the class is very small at the time of graduation. This is due in a large measure to a lack of interest. It seems that in schools where manual training has been introduced this interest has come also. Here the schools are crowded and many applicants turned away because of the lack of accommodations. The pupils attend these schools with such regularity because they like the work. The interest here manifested comes through applying what they hear or read to what they do.

Manual training keeps pupils out of mischief both in and out of school. One principal says; "That the moral influence of Manual training as evidenced in the schools is worth all that this system of training costs". Even out of school hours its influence is easily seen. Their school interests seems in a large measure to influence the boys choice of recreation".

Many pupils in our schools are found who have not their interests so much in the more classical and literary studies as they have in the more mechanical side of their school work. In our common system of schools these pupils are often looked upon as being extremely dull and are many times termed block heads. When if permitted they would show that they are masters along their lines. Manual training schools propose to cultivate both forms



of training.

One of the greatest beneficial effects of this system of training is the cultivation of the love for truthfulness, simplicity and accuracy. The pupil is taught to respect honesty by seeing the weakness and incompetency of dishonesty. The understanding of the sciences and mathematics is made much easier, by understanding the forms, processes and materials and the application of them to practicable problems. "Manual training has done more to hold the interest of the pupils in school on dull days than almost any other influence" said R. W. Foster, principal of one of the Kansas City schools. "On rainy days pupils will spend their noon hours at manual work and thoroughly enjoy it, too".

G. B. Lougan, assistant superentendent of the schools in Kansas City has studied carefully the good accomplished by manual training. He said; "It holds the pupil who is not naturally studious. And I can name a number of pupils who, I am sure are in school at present and who would not be here were it not for the interest they take in the wood work or other forms of manual work".

So when we consider the influence of the body upon the brain and their close relation, also the careful attention they have received together in the past and are receiving in the present we must concede a very prominent place to the physical development in our school system.



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